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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/010,791	11/13/2001	Baoqing Ye	Verizon-17	5855
32127	7590	10/17/2005	EXAMINER	
VERIZON CORPORATE SERVICES GROUP INC.			PHAM, TITO QUANG	
C/O CHRISTIAN R. ANDERSEN			ART UNIT	
600 HIDDEN RIDGE DRIVE			PAPER NUMBER	
MAILCODE HQEO3H14			2667	
IRVING, TX 75038			DATE MAILED: 10/17/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/010,791	<b>Applicant(s)</b> YE, BAOQING	
	<b>Examiner</b> Tito Pham	<b>Art Unit</b> 2667	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 9/19/05
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 15-21 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8-10 is/are allowed.
- 6) ☒ Claim(s) 1-7, 11-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election with traverse of Group I (claims 1-14) in the reply filed on September 19, 2005 is acknowledged. The traversal is on the ground(s) that the claims are closely related in terms of subject matter and are all classified in the same class. This is not found persuasive because as previously stated in the Office's Election/Restrictions mailed August 23, 2005, the claims are classified in the same class but different subclasses which require different fields of search for different inventions. Therefore, the Election/Restrictions requirement is maintained. .

The requirement is still deemed proper and is therefore made FINAL.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description:

- Step 526 as disclosed in page 28 of the specification is not found in the drawing.
- Reference 529 in figure 5 is not described in the specification.
- There is no figure 9 as described in page 31 of the specification.
- There is no step 528 in the drawing as described in page 27 of the specification.

- In page 16 of the specification, the early traffic regulator module 228 is mistyped as 232.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 10 recites the limitation "said average flow rate" in line 1. There is insufficient antecedent basis for this limitation in the claim.
5. Claim 11 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 11, the word "non-responsive" contradicts claim 1 and the inventive concept as described in the application.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-5, 11, and 14 are rejected under 35 U.S.C. 102(e) as being anticipated by Brustoloni.

- With respect to claims 1, 2, and 11, Brustoloni discloses a method of controlling a network node to process a plurality of packet flows (figure 2), the method comprising: receiving packets corresponding to a flow; determining if the packets in the flow correspond to a communication protocol which is responsive to congestion signaling; when said flow is determined to include packets corresponding to a communication protocol which is responsive to congestion signaling: determining if the first flow performs in a manner indicative of responsive to congestion signaling; forward at least some received packets corresponding to the first flow when it is determined that the first flow performs in a manner indicating that it is responsive to congestion

signaling (claim 1); and blocking the packets from said flow when said first flow is determined to perform in a manner indicating that it is non-responsive to congestion signaling (claim 2) (paragraphs 13, 15, 27 and 39). In the case of claim 11, all flows are treated the same whether it is the "first" flow or "additional" flow.

- Regarding claim 3, Brustoloni discloses a method of determining if the flow performs in a manner indicative of responsive to congestion signaling includes: monitoring a flow rate of said flow to determine if the monitored flow rate decreases in response to congestion signaling (paragraph 15). It is interpreted that conforming to "TCP congestion avoidance-rules, as verified by the SPE units" including the step of monitoring the flow rate to ensure a decrease in arrival rate of packets from the source.
- In regard to claim 4, it is inherent in Brustoloni that the monitored flow rate is a packet arrival rate.
- Regarding claim 5, it is inherent or well-known that congestion signaling includes dropped packet information.
- Regarding claim 14, Brustoloni reveals the step of determining if the packets in the additional flow correspond to a communication protocol which is responsive to congestion signaling includes the step of: determining whether said additional flow includes packets which are to be delivered using best effort techniques (paragraph 15).

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. Claims 6, 7, 12, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brustoloni in view of Blumer et al. (hereinafter Blumer).

- With regards to claims 6, 7, 12, and 13, Brustoloni discloses a method of controlling network node to process a plurality of packet flows (figure 2). Brustoloni does not show the step of forwarding at least some received packets includes: determining if the flow rate exceeds a baseline flow rate; and performing a forced flow rate reduction operation in response to determine that flow rate exceeds the baseline flow rate; and dropping at least some received packets from said flow thereby resulting in fewer forwarded packets than received packets. However, Blumer discloses a step of determining if the flow rate exceeds threshold, bandwidth reduction is

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performed in that connection including dropping packets (paragraphs 28 and 30). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include in Brustoloni a step of determining if the flow rate exceeds the threshold and performing flow rate reduction as taught by Blumer for the purpose of reducing congestion at said node.

### ***Allowable Subject Matter***

11. Claims 8-10 are allowed.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tito Pham whose telephone number is 571-272-8617.


The examiner can normally be reached on 8-5 PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tito Pham  
Examiner  
Art Unit 2667

  
CHI PHAM  
SUPERVISORY PATENT EXAMINER  
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10/14/05